

Remote Order Entry System (ROES)

Technical Manual



Version 3.0

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VistA Health Systems Design and Development

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Preface

Purpose of the Remote Order Entry System

The Remote Order Entry System Version 3.0 (ROES 3.0) gives authorized end users at VHA facilities the ability to order products and services from the VA Denver Distribution Center (DDC).

Scope of Manual

This manual provides instructions for the installation and maintenance of the ROES 3.0 software.

Audience

The information in this manual is intended for Information Resource Management (IRM) staff. However it may also be helpful to: National *VistA* Support (NVS), System Design & Development (SD&D), and ADPACs in Audiology and Speech Pathology Service (ASPS) and Prosthetics and Sensory Aids Service (PSAS).

Related Manuals

Remote Order Entry System (ROES) Version 3.0 Security Guide

Remote Order Entry System (ROES) Version 3.0 User Manual

Remote Order Entry System (ROES) Version 3.0 Installation Guide

Introduction

The Remote Order Entry System (ROES 3.0) gives authorized end users at VHA facilities the ability to order products and services from the VA Denver Distribution Center (DDC). This manual provides information regarding the technical components of the ROES 3.0 software. The information in this manual is intended for IRM or equivalent staff who are responsible for the installation, maintenance, and support of the ROES 3.0 application and local facility *VistA* and general IT resources.

Purpose of ROES 3.0

ROES 3.0 was developed to simplify and enhance the ordering of products and services from the Denver Distribution Center (DDC) including hearing aids and numerous other commodities. Ancillary functions such as updating patient records and registering devices may also be done through the Web interface. ROES 3.0 is accessed from the end user's workstation as a Web application through the browser allowing orders to be placed using an interactive, real-time, point and click interface. ROES 3.0 also accommodates keyboard navigation and entry.

ROES 3.0 was designed to use advanced technologies and practices in software design, supporting hardware platform, database management, and network integration to provide DDC customers and staff with simple and easy to use ordering capabilities. The application provides patient care providers and associated Veterans Health Administration (VHA) staff with comprehensive patient information and order histories. It was also designed to use progressive procurement and distribution practices, advanced general business practices, and current VA Regulations, which have evolved since the introduction of ROES 2.0

A definitive criterion used to establish the strategic direction and development path for ROES 3.0 involved combining:

- The necessity to optimize compatibility and data communications capability with established VA systems and business practices
- The objective of applying leading edge information technology resources to strategic business systems development, comparable to the best that can be found in the private sector
- The desire to provide a "progressive continuity" to DDC customers, implementing significant enhancements to the existing application, while minimizing transition apprehension for end users

Benefits of ROES 3.0

The ROES 3.0 application architecture makes available, for the first time, a Web-based application for activities such as order placement and inquiry functions, while retaining and improving upon the character-based interface formerly used in ROES 2.0. It is expected that a Web interface, enabling point-and-click functionality, allows information to be presented in a more organized fashion, enhancing the navigation and data entry procedures.

In another departure from previous versions, the majority of ROES 3.0 system software and data files reside on DDC computer resources, leaving only selected key components on local Medical Center systems. There are a number of factors supporting this transition. These include:

- Assurance of a singularity and consistency of the available product database
- Opportunity for immediate real-time processing of orders placed
- Reduced dependency on VAMC application of patches and file modifications

Higher capacity VA wide area network resources implemented since ROES 2.0 enable these architectural changes.

In addition to the overall architecture, ROES 3.0 provides a number of process-specific benefits, features, and functionality improvements, such as the following:

- 1. Provides users with a simplified ordering process.
- 2. Includes cost comparison functionality for display/selection of all contract hearing aids meeting selected specifications.
- 3. Allows repair orders to be entered by the provider.
- 4. Includes a module to enter audiometric data and display or print the resulting audiogram in graph or tabular format
- 5. Provides information in "real time".
- 6. Provides enhanced commodity ordering capabilities.
- 7. Provides enhanced device registration capabilities.
- 8. Provides enhanced display/update capabilities for authorized aids.
- 9. Provides enhanced station stock ordering capabilities.
- 10. Decreases delivery time to patients since orders are submitted immediately for processing.
- 11. Links with the CPRS clinical record application already in place in the VHA environment.
- 12. Provides increased accuracy in patient eligibility determination prior to order placement, with improvements to subsequent reporting and statistical analysis.

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- 13. Provides access to multiple ROES 3.0 functions (clinical and administrative) through a comprehensive entry point.
- 14. Provides supervisory designation of user authorization/approval levels.
- 15. Provides a Cochlear Implant registry for tracking of cochlear implant information.
- 16. Reduces the likelihood of erroneous orders (i.e., orders for combinations of device specifications that cannot be accommodated by hearing aid manufacturers).

Orientation

General Rules for ROES 3.0 Data Entry pages

- 1. There are no "double clicks" in ROES 3.0. Click the selection one time only.
- 2. There are no "right mouse button" commands in ROES 3.0.

NOTE: There is a key distinction between Windows-based applications (where double-clicks and right-button functionality are common) and web applications. There will not be a noticeable consequence to the user for these actions; however, the results may be unexpected. Double clicking may cause a drop-down list to open and close quickly. Right-clicking will produce selectable functions made available by the browser, but nothing specific to ROES. We strongly discourage use of the right-click in order to prevent the use of the browser's back and forward functions.

- 3. It is recommended that users not click the "X" in the top right hand section of the ROES 3.0 browser window to close a window. Use the navigational links and buttons provided within the application to exit the system. Closing the browser window without properly exiting the application will not have any detrimental effects on the user but may leave an open user session and incomplete or 'phantom' order information in the application.
- 4. Only use the ROES 3.0 pages for navigation never use the windows provided "back" and "forward" commands.
- 5. The command buttons within the application perform background housekeeping functions that maintain the integrity of the order as a user navigates through the ordering process. The Windows browser's 'Forward' and 'Back' commands bypass those functions and could result in loss of information from the order.
- 6. "Grayed out" fields cannot be accessed.
- 7. Any Exit button will return you to the *View Order History* page.

Symbols Used in Manual

In code examples, the caret (^) or 'U' may be used interchangeably as separators.

The caret is also used to designate a global reference when used in front of a global name as in ^DPT (

ROES 3.0 Display Considerations

IMPORTANT NOTE: ROES 3.0 application pages display best at a display resolution of 1024x768. If this is not an end user's preferred resolution, ROES pages will not appear properly formatted. This will not affect application functionality, but may make page content more difficult to understand and navigate. If an end user chooses to increase their resolution to 1024x768, they should be aware that all other Windows applications and objects in their Windows environment will be reduced in size.

Recommended Desktop Minimums for ROES 3.0

SPECIFICATION	RECOMMENDED MINIMUM
Processor	200 MHz
Memory	64 MB
Hard Drive	4GB
Video	AGP 2x w/4MB
CD-ROM	8x
Monitor	17" VGA, .28 pixel resolution
LAN Interface	10/100 Mbps Ethernet
Keyboard	101 -key
Mouse	Microsoft Compatible
Operating System*	Microsoft Windows 9x
	Microsoft Windows NT Workstation v4.0 or Windows 2000 Pro strongly recommended.
Browser**	Internet Explorer v5

^{*}NOTE: ROES 3.0 is compatible with Microsoft Windows XP.

A system meeting the above specifications can be expected to provide the functionality necessary for ROES 3.0. The VA Assistant Secretary for Information and Technology has established a set of minimum configurations for any new procurement of desktop systems across the enterprise (VA Directive 6401). For most of the specifications listed above, the VA minimum baseline exceeds the recommended minimum for ROES 3.0. The above specifications are provided to allow for use of equipment in current inventory, if necessary. In assessing procurement and/or other resource acquisition actions to meet ROES 3.0 desktop requirements, each facility is advised to give consideration to the specifications mandated by the above-mentioned Directive. Conformance with these established and/or emerging VA standards is encouraged. A dynamic update of the VA desktop standards is maintained at http://vaww.vairm.vaco.va.gov/vadesktop/.

^{**}NOTE: There are no minimum Browser Service Pack requirements.

Getting Additional Information

Refer to the following resources for additional information about the Remote Order Entry System (ROES).

- Visit the VistA document library: http://www.va.gov/vdl/ for the ROES 3.0 PDF and WORD documentation.
- Use the *KIDS Build File Print* [XPD PRINT BUILD] option if you would like a complete listing of package components exported with this software.
- Use the *KIDS Install File Print* [XPD PRINT INSTALL FILE] option if you'd like to print out the results of the installation process.
- Use the *List Routines* [XUPRROU] option prints a list of any or all of the ROES 3.0 routines.
- The Installation and User manuals also contain additional information.

Chapter 1: Implementation and Maintenance

Application Architecture Overview

ROES 3.0 includes application components that reside on two systems: the VAMC *VistA* system and the DDC system. The VAMC components include 'M' routines, RPC Broker calls, and Delphi executables. The general purpose of these components is to gather information and initiate an interactive session to the DDC-resident ROES 3.0 Web application, passing the assembled information to the application. Once in the Web application, ROES users then place orders and perform other order management functions within that application.

Different capabilities within ROES 3.0 are invoked by each of two Delphi executables. One executable and associated set of broker calls integrates as an option on the CPRS Tools menu (see also *Chapter 3: Charts*). This set of components performs the following functions:

- Gathers patient information for the selected patient
- Determines or initiates a request for determination of the patient's <u>eligibility</u> for DDC services
- Assembles patient and user information
- <u>Initiates a browser session</u> to the ROES 3.0 Web application and passes the assembled information to ROES
- Allows for copying of specified order information to the Windows clipboard with subsequent pasting to a CPRS Progress Note or to an external application

The second combination of Delphi executable and associated set of broker calls comprises an executable <u>application</u> that can be invoked directly (separate from CPRS) or from an application shortcut, and performs the following functions (see also *Chapter 3*: <u>Charts</u>):

- Assembles user information
- Initiates a browser session to the ROES 3.0 Web application and passes the assembled information to ROES 3.0

The DDC-resident component of ROES 3.0 exists as a Web-based order entry application. The interactive order entry process utilizes the browser as the application interface. Depending on which of two ROES 3.0 entry points is accessed (determined by the calling Delphi executable), end users have access to specific functional modules associated with the entry and management of orders for DDC products and services. Navigation and order entry is accomplished using typical Windows and Web methods, including drop-down selection, check boxes, radio buttons, free text, etc. Information entered in the Web application is processed by the DDC order fulfillment system.

Overview of Installation Instructions

Implementation of ROES 3.0 requires both server-side *VistA* installation procedures and client-side desktop installation procedures.

The ROES 3.0 distribution package includes a KIDS build. The KIDS build installs the necessary routines, menu options, and RPC broker calls within the *VistA* environment.

The ROES 3.0 GUI requires that the RPC Broker V1.1 be installed on any workstation from which the GUI will be executed. Refer to the RPC Broker Website: http://vista.med.va.gov/broker/download.asp to install the RPC Broker.

NOTE: If a workstation can already connect successfully via CPRS, BCMA, or PCMM, then the RPC Broker has already been installed.

Refer to the ROES 3.0 Installation Guide for complete installation instructions.

Companion QUASAR Patch

IMPORTANT NOTE: DDC ROES 3.0 order processing incorporates patient-specific audiometric information from the Quality: Audiology and Speech Pathology Audit and Review (QUASAR) package. A companion QUASAR patch (ACKQ*3.0*3) provides end users with data entry and display capabilities for this information. It is recommended that ACKQ*3.0*3 be installed concurrently with ROES 3.0.

Chapter 2: Files

There is one file exported with the ROES 3.0 package. It is for the storage of eligibility requests and replies. It is a standard ROES name spaced (RMPF), FileMan-compatible file.

When the internal application logic is not able to definitively determine a patient's eligibility (see <u>Application Architecture Overview</u>), a request is sent to a designated PSAS mail group for <u>eligibility determination</u>. This process uses the ROES ELIGIBILITY CONFIRMATION file (#791814) to temporarily store pending eligibility information, along with the **VistA** MESSAGE file (#3.9) reference where comments related to this eligibility determination process are held.

The <u>eligibility determination process</u> creates entries in the "^RMPF(791814," global in the following format:

```
^RMPF(791814,D0,0) = (#.01) PATIENT [1P] ^ (#.02) DATE REQUEST ENTERED [2D] ^ (#.03) ENTERING USER (ASPS) [3P] ^ (#.04) EXPIRATION DATE [4D] ^ ^RMPF(791814,D0,1) = (#1.01) SUGGESTED ELIGIBILITY [1F] ^ (#1.02) EMAIL MSG NUMBER [2P] ^ ^RMPF(791814,D0,2) = (#2.01) PSAS ELIGIBILITY [1F] ^ (#2.02) APPROVE/REJECT^ (#2.03) USER (PSAS) [3P] ^ (#2.04) ACTION DATE [4D] ^
```

All information local to the station or clinic is stored in this global while awaiting PSAS approval of eligibility and is kept in the file a defined period after approval or rejection (for order modifications). This global entry is created and referenced by the ROES 3.0 application to ensure that requests for eligibility determination are acted upon in a timely manner and to provide a database of eligibility if additional ROES-related actions are necessary within a defined time period after the original determination. Currently this defined period is two years.

A record is created when a request for PSAS eligibility determination is initiated. The entry remains for up to 60 days after creation while awaiting PSAS action on the request. Beginning seven days after creation, if there has been no PSAS action, a daily alert is generated (option RMPFDE4) to mail group RMPF ROES UPDATES (PSAS) as a reminder of the request. PSAS action generates a VA MailMan message, via option RMPFDE2, to the RMPF ROES UPDATES (ASPS) mail group indicating approval or disapproval.

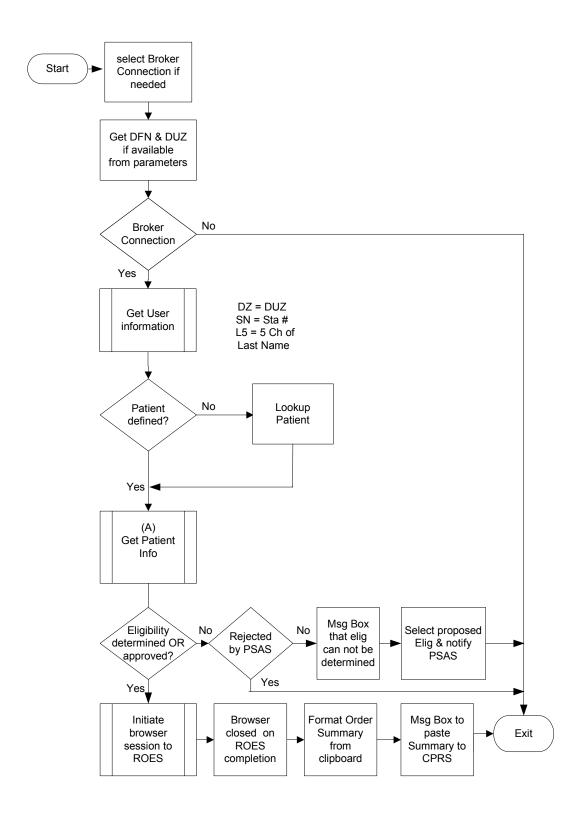
Additional information on this process is available in *Chapter 5: Exported Options*.

Chapter 3: Charts

ROES 3.0 Patient Order from CPRS

This ROES 3.0 access point is used when performing functions that are primarily patient-specific. In accordance with Standard Operating Procedure (SOP) 192-507, the patient identifier obtained from the Master Patient Index (MPI-VistA) is included in information passed to the DDC.

The following diagram describes the flow of functions performed when the ROES option is selected from the CPRS Tools menu:

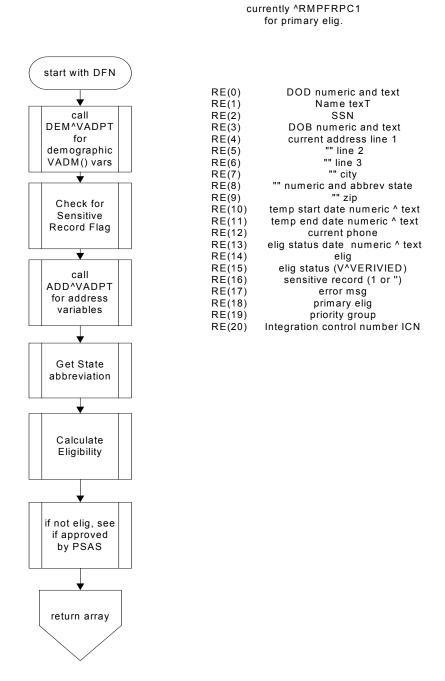


ROES 3.0 Patient Order from CPRS Flowchart

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Get Patient Information

The following diagram describes the tasks performed by the 'Get Patient Information' function on the previous page.



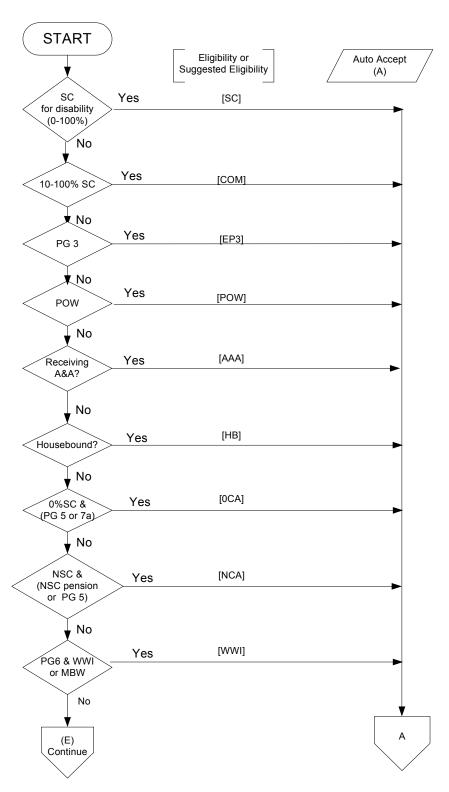
ROES 3.0 Get Patient Information Flowchart

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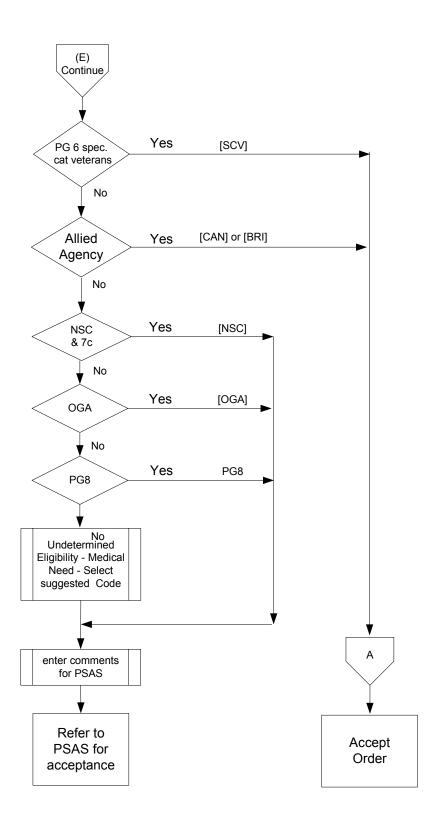
Eligibility Determination

The following diagram describes the algorithm used within the application code to determine patient eligibility for DDC products and services. The business rules used in this eligibility determination were developed in accordance with national ASPS Program Office and VA policy and regulations.

Eligibility Calculation



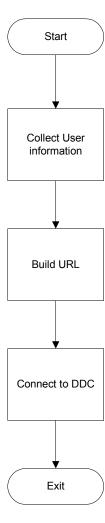
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ROES 3.0 Eligibility Calculation Flowchart

Desktop Station Order Application

The following diagram describes the flow of functions performed when the ROES stand-alone (non-CPRS) desktop application is invoked.



ROES 3.0 Desktop Station Order Flowchart

Chapter 4: Routines

VistA Routine List

ROUTINE	DESCRIPTION
RMPFRPC0	Used by RPC RMPFELIG to collect information and calculate eligibility and return to Windows.
RMPFRPC1	Used by RPC RMPFDEMOG to collect patient demographic information and return to the Windows.
RMPFRPC3	Handles messages between PSAS and ASPS regarding eligibility.
RMPFDE2	Holds the function setting up the list of eligibility requests that have not been approved or rejected. Used by <i>VistA</i> menu option RMPFDE2 (Display Eligibility Requests).
RMPFDE3	Eligibility approval process for menu option RMPFDE2.
RMPFDE4	Sends alerts when eligibility requests have not been acted on. Used by VistA menu option RMPFDE4 that is placed as a scheduled option to run daily.

Upon selection of the ROES 3.0 option from the CPRS Tools menu, an RPC Broker lookup is done to retrieve the patient DFN. A call is then made through the RMPFDEMOG RPC. From the PATIENT file, the name, SSN, date of birth, current address, and temporary address parameters are retrieved. The routine RMPFRPC0 is then called for the eligibility calculation information. This routine is also called from the RMPFELIG RPC.

Delphi Routine list

ROUTINE	DESCRIPTION
ROES3.exe	Main application for patient orders.
R3Main.pas	Main Pascal program for ROES3.exe.
FMainForm.dfm	Main form for the application.
CopyUtil.pas	Formats and copies the order information.
FMemoForm.dfm	Form used in the copying and formatting.
uR3Elig.pas	Determining the patient eligibility.
FR3Elig.dfm	Form used to select suggested eligibility and add comments.
Roes3DeskTop.exe	Main station order routine to be run from the desktop.
DesktopApp.pas	Main Pascal program for the desktop application.

Chapter 5: Exported Options

ROES 3.0 Patient Order from CPRS (GUI)

In order to invoke the Delphi utility that initiates access to ROES 3.0, the **RMPF ROES3** option should be assigned to any individual who places ROES 3.0 orders for patient-specific items. ROES 3.0 users are typically ASPS and PSAS staff as designated by the appropriate Service Chief. A call to the executable **ROES3.EXE** will normally be placed on the CPRS Tools menu (*see ROES 3.0 Installation Manual*).

NAME: RMPF ROES3

MENU TEXT: ROES 3 OPTION ACCESS

TYPE: Broker (Client/Server)

PACKAGE: REMOTE ORDER/ENTRY SYSTEM

DESCRIPTION: This is the option that allows user's to access the Delphi executable that connects the user to the

DDC Website from the desktop or CPRS Tools menu.

RPC: RMPFDEMOG RPC: RMPFELIG

RPC: RMPF ELIG MSG

RPC: DDR GETS ENTRY DATA

RPC: DDR LISTER

RPC: DDR FINDER

RPC: DDR KEY VALIDATOR

RPC: DDR GET DD HELP

RPC: DDR VALIDATOR

RPC: XUS AV CODE

RPC: XUS SIGNON SETUP

RPC: XUS AV HELP

RPC: XUS GET USER INFO

RPC: XWB CREATE CONTEXT

RPC: XWB GET VARIABLE VALUE

Station Orders from the Desktop (GUI)

As described earlier, a desktop (non-CPRS) application is also available for initiating certain types of orders through ROES 3.0. In order to run this application, the user must also have the **RMPF ROES3** option assigned to his/her menu tree for the context to be created. The executable is **Roes3Desktop.exe** and consists of Delphi routines: DesktopApp.pas and an invisible form, Form1.dfm.

This option should be assigned to ASPS and PSAS staff who place ROES orders other than patient-specific orders through the CPRS entry point. This may or may not be the same staff who use the CPRS option, as determined by the appropriate Service Chief. Prior to installation, the DDC establishes one or more persons at each facility who have 'Supervisory' access to ROES 3.0. These designated ROES supervisors use a module within the desktop application to indicate order entry/approval privileges for each member of their staff. See the *ROES 3.0 Installation Manual* for more detailed instructions.

Notice of Pending Eligibility Requests (VistA)

When the related software algorithm cannot determine a patient's eligibility, a request is sent to PSAS staff for an eligibility determination. If a response is not received from PSAS within seven days, a daily alert is generated. The ROES 3.0 option to notify PSAS that there are eligibilities that have gone at least seven days without an action is **RMPFDE4**. This **V**ist**A** option invokes a routine that loops through the global ^RMPF(791814,"C",2,) (see Chapter 2). The second piece of the zero node contains the request date. If seven or more days have elapsed since the request date and it is still in pending status, an alert is sent to the RMPF ROES UPDATES (PSAS) mail group as a reminder that a request is awaiting action. This option should be scheduled (see the ROES 3.0 Installation Manual).

NAME: RMPFDE4

MENU TEXT: Auto Que of Eligibility Request Alerts

TYPE: run routine

PACKAGE: REMOTE ORDER/ENTRY SYSTEM

DESCRIPTION: This is a ROES3 option that loops through the requests for eligibility determinations from ASPS. The alerts are sent to the requesting user and the RMPF ROES UPDATES (PSAS) mail group. The alerts start after the request has been entered and not acted on within 7 days. They are sent daily until acted upon by PSAS with an Edit, Reject, or Acceptance.

ROUTINE: START^RMPFDE4

UPPERCASE MENU TEXT: AUTO QUE OF ELIGIBILITY REQUES

Prosthetics Eligibility Approval (VistA)

Selected PSAS staff should have access to the **RMPFDE2** option to evaluate eligibility determinations for certain patient-specific orders. This **V**ist**A** option lists requests for eligibility approval that have not been acted upon, as maintained within the ^RMPF (791814,"C",2) global. This option should be assigned to whoever is responsible (as determined by PSAS staff) for approving ROES 3.0 patient eligibilities. No RPCs are used. After listing the requests awaiting action, the user may edit, approve, or reject the request. This fills in the information in the ROES ELIGIBILITY CONFIRMATION file (#791814) and changes the kill date in the 4th piece of the zero node to two years into the future. This option also notifies everyone in both the PSAS and ASPS ROES mail groups that an action has been taken.

NAME: RMPFDE2

MENU TEXT: Display ROES3 Eligibility Requests

TYPE: run routine

PACKAGE: REMOTE ORDER/ENTRY SYSTEM

DESCRIPTION: This option allows the processing of requests for eligibility determination from PSAS.

ROUTINE: LIST^RMPFDE2(.ARRAY)

UPPERCASE MENU TEXT: DISPLAY ROES3 ELIGIBILITY REQU

Archiving/Purging

There are no package-specific archiving or purging procedures or recommendations for the ROES 3.0 package. All product and order detail information is stored and maintained on the DDC system. The only locally-stored information is that related to <u>patient eligibility determination</u>, which is stored in the ^RMPF(791814 the ROES ELIGIBILITY CONFIRMATION global. In general, retention of entries is required for a minimum of two years from the date an eligibility assessment is entered into the file. Purging of entries beyond this time frame is being considered and if appropriate, a purge function will be issued in a future ROES 3.0 patch. The associated

comments shared between ASPS and PSAS are included in the Message file (# 3.9) text. These messages are subject to the standard VA MailMan archival/purging practices in place.

Upon implementation and complete cutover to ROES 3.0, many of the *VistA* routines and globals maintained on the local VAMC system under ROES 2.0 will no longer be needed. The DDC will provide separate guidance regarding proper removal of residual ROES 2.0 components.

Chapter 6: Entry Points & APIs

New Remote Procedures

RPC NAME	PURPOSE	INPUT	OUTPUT
RMPFDEMOG	Collection of patient	DFN from local	Subscripted array:
	demographic information	PATIENT file (#2)	0=FM and print DOD
			1=name text
			2=FM and print DOB 4=current addr line 1
			5=current addr line 2
			6=current addr line 3
			7=current city
			8=current state
			pointer and abbrev
			9=current zip
			10=FM and print temp start date
			11= FM and print temp end date
			12=current phone
			13= FM and print elig status date
			14=calc eligibility
			15=elig status (V^Verified)
			16=sensitive record

RPC NAME	PURPOSE	INPUT	OUTPUT
			(1 or "") 17=error message
			18=primary eligibility
			19=priority group
RMPFELIG	Collection of patient	DFN from local	Subscripted array:
	eligibility information	PATIENT file (#2)	(0)= FM and print DOD
			(1)= FM and print eligibility status date (2)=calculated ROES3 eligibility
			(3)=eligibility status(V^Verified)
			(4)=sensitive record(1 or "")
			(5)=error msg
			(6)=primary elig
			(7)=priority group number
RMPF ELIG MSG	Delivery of a request for eligibility	(1) DUZ of the user sending the message	Returns the VA MailMan message number or an error.
	verification to the RMPF ROES UPDATES (PSAS)	(2) GRP is the Mail Group to send to	
	mail group	(3) SUBJ is the subject for message	
		(4) RMPFARR is an array containing the message text	

External Relations

ROES 3.0 requires a standard *VistA* operating environment, *VistA* RPC Broker and Internet Explorer in order to function correctly. See the recommended minimums in *Orientation* section of this manual.

As described in the <u>Application Architecture Overview</u>, the VAMC resident components interface externally with the DDC Web-based ROES 3.0 application. Once a ROES 3.0 order has been submitted and the order enters the DDC processing cycle, DDC order fulfillment systems complete the processing and payment of the order through established external interfaces, such as those with the VA Financial Management System (FMS) and with DDC contract vendors.

Integration Agreements

ROUTINE	FILE NUMBER	AGREEMENT #		
RMPFRPC0	2	# 174		
RMPFRPC1	38.1	# 767		

Internal Relations

Authority to Use ROES 3.0

Access to the ROES 3.0 options is controlled by menu assignment and application access (see the *ROES 3.0 Installation Manual* for details). Supervisors are designated and assigned within the DDC system (in coordination with the respective Service Chief) and determine the level of order entry/approval privileges for members of their staff. Only supervisors have access to the DDC module used for assigning these privilege levels. All users accessing the DDC Web application must have the appropriate security agreement signed and on file before access to the DDC Web application will be allowed. If a user already has access for the Remote Inquiry System from ROES 2.0, they will already be in the system and can continue to use their assigned codes.

Internal Option Use

ROES 3.0 option RMPFDE4 can be invoked independently to send alerts to PSAS about requests for eligibility determination that are over 7 days old. Preferably, it should be scheduled using TaskMan to run daily. The initial timeframe can be changed from 7 days by setting the value of RMPFDY to another number of days in the TaskMan Scheduler option. The Installation Manual has detailed instructions for the setup of this option.

Remote System Access

ROES 3.0 includes no specific restrictions or limitations on remote access to the application. However, note that ROES 3.0 can be accessed only through the Delphi executable applications integrated into the CPRS and desktop entry points. The methodology used to implement remote access must allow for adequate performance of RPC broker-based applications. If the remote access implementation is sufficient to support broker access and CPRS, then ROES 3.0 access should be adequately supported, as well.

Acronyms

TERM	DESCRIPTION		
API	Application Programmer Interface		
ASPS	Audiology and Speech Pathology Service		
DDC	Denver Distribution Center		
GUI	Graphical User Interface		
НТТР	HyperText Transfer Protocol		
IRM	Information Resource Management		
PSAS	Prosthetics and Sensory Aid Service		
ROES	Remote Order Entry System		
RPC	Remote Procedure Call		
VistA	Veterans Health Information Systems and Technology Architecture		

Glossary

TERM	DEFINITION
ALERTS	Brief online notices that are issued to users as they complete a cycle through the menu system. Alerts are designed to provide notification of pending computing activities, such as the need to process a request for eligibility.
APPLICATION PACKAGE	Software and documentation that support the automation of a service. In this case, the Remote Order Entry System.
KERNEL	A set of V <i>ist</i> A software routines that function as an intermediary between the host operating system and the V <i>ist</i> A application package (in this case ROES 3.0).
LISTENER	In ROES 3.0 this is the RPC Broker on the workstation and the server.
NAME SPACING	A convention for naming VistA package elements, assigned by the Database Administrator (DBA). For ROES 3.0 the name spacing is RMPF.
OPTION	An item in the VistA OPTION file (#19).
ROUTINE	Groups of program lines that are saved, loaded, and called as a single unit via a specific name.
SECURITY KEY	A non-visual object or code that provides a layer of protection on the range of computing capabilities available with a particular software package. ROES 3.0 uses menu access for controlling access to its options.
SUBSCRIPT	A numeric or string value that identifies a specific node within an array or global.

Appendices

A: Error and Other Messages

The message 'No Patient has been selected' appears if a patient name or DFN was not entered.

The message 'Invalid Patient Selection.' appears if the patient lookup fails in the CPRS tools option.

The message 'Cannot order without a SSN' appears if the SSN field in the PATIENT file is blank.

The message 'Cannot order Through ROES without a Patient Date of Birth' appears if the DATE OF BIRTH field in the PATIENT file is blank.

The message 'Cannot order through ROES without a Patient Name' appears if the NAME field is blank in the PATIENT file.

The message **'**Alert** Allied Agency Agreement 'must be on record at the DDC'** if the patient's eligibility is calculated to be either CAN (Canadian) or BRI (British) and Service Connected.

The message 'Cannot order with this eligibility: (elig) Ordering requires PSAS Approval' if the patient does not have a calculated eligibility or the eligibility selected is BLR, VOC, NSC or NONE.

The message 'Order Eligibility (eligibility name) was disapproved by (user name)' is shown when ASPS attempts an order and PSAS has responded to the eligibility request by rejecting it. It remains in that status for 30 days after rejection.

The message 'Eligibility (eligibility name) was approved by (user name)' is shown when ASPS attempts an order and PSAS has responded to the eligibility request by accepting an eligibility. It remains in that status for 30 days after approval.

The message 'Failed to connect to Denver. *** DO NOT SIGN THE ORDER -- IT WILL BE DENIED ***' is shown when the http connection to the DDC Website fails.

The message 'Could not retrieve necessary patient information' is shown if the lookup of patient demographic information fails

The message 'Connection to Broker Server could not be established' if the connection to the selected Broker port could not be completed.

The message 'You do not have access to this option (context failed)' is shown if the user does not have the necessary option assigned to his menu tree.

The message 'A problem was encountered communicating with the Server (XUS GET USER INFO could not be executed)' is shown if this remote procedure call fails.

The message 'User Authorization could not be established' is shown if the above remote procedure call returns a nil.

The message 'Message to PSAS not sent - error encountered!' is shown if the remote procedure call RMPF ELIG MSG fails.

The message 'Message number to PSAS and User is: (message #)'Sent: (date/time)' is shown after a request for eligibility is sent to PSAS for approval.

The message 'If an Order was placed it will now be formatted and placed on ClipBoard.

Close this box ONLY when finished with the order

*** Thank you for visiting the DDC ***'

is shown after closing the DDC Web page (EXIT ROES) for a patient order. Station orders are accessed from the Desktop application and are not prepared for pasting into the CPRS notes pages.

B: Mail Groups

- 1. RMPF ROES UPDATES (ASPS) receives messages (VA MailMan) that a request for eligibility has been returned from PSAS.
- 2. RMPF ROES UPDATES (PSAS) receives messages (VA MailMan) that there are pending eligibility determinations or that they have been processed.

These mail groups are set up during the installation, if it was not set up during a prior ROES 3.0 install. At that time a coordinator was selected for each group and they would add the necessary individuals to their group. See the *ROES 3.0 Installation Manual* for further instructions.

C: Sample VistA Mail Message with Request for Eligibility Approval

Subj: ROES Eligibility Request [msg number] Date Sent

From: PROVIDER, ASPS

Please approve the following eligibility: Patient: TESTPATIENT,ROSEY

SSN: 000009999P

Suggested Eligibility: AAA AAA Aid and Attendance

Comments:

This is where any comments added to provide assistance in eligibility determination will appear.

D: Sample VistA Mail Message with Response to Eligibility Approval Request

Subj: ROES PATIENT ELIGIBILITY UPDATE [msg number] Date Sent

From: USER, PSAS

ROES Patient Eligibility has been updated for the following patient:

TESTPATIENT, ROSEY 000009999P

EP3

Comment: Accepted

[This shows that the eligibility was approved, but changed to EP3]

E: Section 508 Compliance Statement This application has been evaluated and approved for compliance with Section 508 of the Rehabilitation Act Amendments of 1998.

F: Reques	st for	Access	and	Verify	Codes	from	DDC
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Please send an e-mail to <u>G.IRM@DDC.VA.GOV</u> or DDC <u>IRM@MAIL.VA.GOV</u> to request the necessary for or call DDC Customer Support at (303) 914-5145.	rms

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